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OPTIMUM OPERATING HOURS FOR AMBULATORY CLINICS: A PILOT STUDY.(U)

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OPTIMUM OPERATING HOURS FOR AMBULATORY CLINICS: A PILOT STUDY

A. David Mangelsdorff, Ph.D. Health Care Studies Division Academy of Health Sciences, US Army Fort Sam Houston, Texas 78234



Final Report
April 1981

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Prepared for:

UNITED STATES ARMY HEALTH SERVICES COMMAND Fort Sam Houston, Texas 78234

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|---|--|
| 1. REPORT NUMBER 2. GOVT ACCESSION | NO. 3. RECIPIENT'S CATALOG NUMBER |
| HCSD #81-001 AD-A10 | 2 817 |
| ATTITLE (and Subtitio) | TIPE OF REPORT & PERIOD COVERE |
| 6 | 19/ |
| TOptimum Operating Hours for Ambulatory | Final Repert |
| Clinics: A Pilot Study | DEDECTION ON SEPORT NUMBER |
| | 4.0 |
| A. David Mangelsdorff Ph.D. | 8. CONTRACT OR GRANT NUMBER(*) |
| A. bavra rangers dot it. Fit. b. | |
| | |
| 9. PERFORMING ORGANIZATION NAME AND ADDRESS | 10. PROGRAM ELEMENT, PROJECT, TASK |
| Health Care Studies Division | AREA & WORK UNIT NUMBERS |
| Academy of Health Sciences, US Army | |
| Fort Sam Houston, Texas 78234 | |
| 11. CONTROLLING OFFICE NAME AND ADDRESS | 12. REPORT DATE |
| Commander, US Army Health Services Command | // Apr 81 |
| ATTN: HSPA-C Fort Sam Houston, Texas 78234 | 12 NUMBER OF PAGES |
| 14. MONITORING ACENCY NAME & ADDRESS(If different from Controlling Offi | (ce) 15. SECURITY CLASS. (of this report) |
| (12) 011 | |
| (1) 29 | Unclassified |
| | 15a. DECLASSIFICATION/DOWNGRADING |
| | / SUMEDULE |
| 16. DISTRIBUTION STATEMENT (of this Report) | |
| In 7 d med de al. 19 de al carle card a ca | |
| . Unlimited Distribution | |
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| 17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if differe | nt from Report) |
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| 18. SUPPLEMENTARY NOTES | |
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| 19. KEY WORDS (Continue on reverse side if necessary and identify by block nu | mber) |
| Ambulatory care; Operating hours; Medical Center | er. Patient attitudes: Staff |
| perceptions | or, racrene activaces, starr |
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| 20. ABSTRACT (Continue on reverse side if necessary and identify by block nur | |
| Most medical treatment facilities follow a set | • |
| Ambulatory Clinics which closely conforms to the | pattern for the operation of the |
| tion of the post. However, are patients aware | s duty nours of the normal oper of the operating hours of |
| selected ambulatory care clinics and are these | operating hours acceptable to |
| the patients? Patients were surveyed about the | operating hours of the clinic |
| from which they sought health care. Staff member | ers of selected clinics were |
| surveyed about the hours of operation of the cl | ludes the servendence of the |

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hours, to staff and patients, and about patient needs. The study objectives were: (1) to determine the optimal hours for certain ambulatory care clinics to be operational based on consumer and staff responses, (2) to determine the feasibility of operating the selected ambulatory care clinics during optimum hours, and (3) to determine the acceptability of changes in forms of operations to users and providers of health care. Staff members believed the clinic operating hours were reflective of patient needs and that the normal operating hours were both convenient and preferable for the patients. Staff members perceived the clinic operating hours were reflective of staff needs. Patients reported the normal operating hours of the clinic as both convenient and preferable to them. Staff reported being generally unwilling to change the operating hours of the clinic.

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1. INTRODUCTION.

- a. Problem. To determine the optimum hours for the operation of ambulatory clinics for both health care providers and health care consumers.
- b. Purpose. The investigation will consider operating hours of selected ambulatory patient care clinics. A report will be developed which will demonstrate feasible schedules for selected ambulatory clinics that would cover the optimal operating hours.

c. Background.

Commercial Statement of Commercial Statement Commercial Statement of the Commercial St

- (1) Most Medical Treatment Facilities (MTFs) follow a set pattern for the operation of their ambulatory clinics which closely conforms to the duty hours of the normal operation of other post activities. Although the duty hours in the MTF may be convenient for health care providers, the hours may be inconvenient for the health care consumers.
- (2) Literature surveys were performed on the keywords "flexitime" and "outpatient scheduling." The searches were by: MEDLARS II (search number 5415009), Defense Documentation Center (searches 085615 and 086393), and Defense Logistics Studies Information Exchange (search number 6525-79).
- (3) Patient's satisfaction with health care received is an important factor in determining the quality of the health care services. Numerous instruments have been used to assess patient's satisfaction and reactions (Ware et al., 1978) Several investigators have measured various aspects of patient's satisfaction with the convenience of the medical activity including perceptions of operating hours.
- (4) Mangelsdorff (1979, 1980) used the Patient Satisfaction Question-naire to assess patients' perceptions of the health care provided in ambulatory care clinics at Ft Ord, California. Using a five-point Likert Scale ranging from "completely dissatisfied" (1) to "completely satisfied" (5), patients reported a value of 4.62 (the mean of 1610 respondents) to the statement "Convenience of operating hours of this clinic." Patients were satisfied with the general care received, reporting a value of 4.52 to the statement "Quality of health care" (Gerstenberger, Eschen, Lotz, and Mangelsdorff, 1976).
- (5) The report of the Military Health Care Study (1975) surveyed beneficiaries eligible for care in military medical facilities and civilian hospitals in Northern California and at Ft Hood, Texas during April through July 1974. Respondents felt the overall quality of health care was satisfactory (both in military and in civilian facilities). To the statement "Care is hard to get outside of regular office hours," roughly 50% of the respondents felt the statement was true for both civilian and military health care facilities.
- (6) Berkanovic and Marcus (1976) demonstrated that consumer satisfaction results from organizational behaviors that are manipulable by policy changes. Satisfaction with health services was related to "Trouble getting an appointment" and "Trouble seeing doctor without appointment." "Trouble getting an appointment" influenced the patients "Tendency to delay" and "Actual delay" in seeking health care.

- (7) Ware and associates have investigated the components of patient satisfaction with health services (1975, 1978). Among the multiple characteristics that influence patient satisfaction are "availability of medical care resources," "accessibility/convenience of services," and "quality of care."
- '(8) Wilson (1977) measured patient satisfaction in a Navy Family Practice Clinic in May 1975. Patients reported satisfaction that "Regular office appointments can be made with little delay." A majority of the respondents (55%) did not know if "It is difficult to see a doctor after regular hours or on the weekend." A significant portion (24%) did not know whether "In a sudden illness, it is difficult to get an immediate appointment with the doctor during regular office hours."
- (9) Zyzanski, Hulka, and Cassel (1974), in their scale for measurement of satisfaction with medical care, included several items dealing with cost/convenience: "People complain too much about how hard it is to see a doctor." "It is hard to get a quick appointment to see a doctor," "Doctors should have evening office hours for working people." The category of cost/convenience was a major concern to patients.

OBJECTIVES.

The study objectives are:

- (1) To determine the optimal hours for certain ambulatory care clinics to be operational based on consumer and staff responses.
- (2) To determine the feasibility of operating the selected ambulatory care clinics during optimum hours.
- (3) To determine the acceptability of changes in forms of operations to users and providers of health care.

3. METHODOLOGY.

a. Overall approach. Surveys of health care consumers and health care providers were conducted at selected ambulatory care clinics. Comparisons were made between responses.

b. Data collection.

- (1) Health care consumers were asked which operating hours they prefer to come to the clinic, their knowledge about the clinic operating hours, and selected demographic characteristics. See Appendix Λ .
- (2) Providers were surveyed about the hours of operation of their clinics. See Appendix B.
- (3) The study was conducted using survey instruments mailed to the medical treatment facility commander. Surveys were coordinated through the Personnel Division. When completed, the instruments were returned to Health Care Studies Division.

c. Analysis of Data:

(1) Descriptive statistics (means, standard deviations, frequencies) of responses were calculated.

- (2) Consumers' responses were compared with those of providers as to the hours of operation of six selected outpatient clinics.
- (3) The CDC 6500 computer at Ft Leavenworth, Kansas, was used to run programs from the Statistical Package for the Social Sciences (Nie et al., 1975).

4. FINDINGS.

- a. Staff Responses. Surveys were received from 133 staff members of the 469 distributed (28%). Compliance was voluntary. Six clinics were selected for analysis. Mean responses to each question are entered as appropriate Appendix A. Table 1 contains staff responses by clinic and overall.
- b. <u>Patient Responses</u>. Surveys were received from 585 patients during the recording period. Compliance was voluntary. Responses from patients to the six clinics selected for staff analysis were analyzed. Mean responses to each question are entered in Appendix B. Table 2 contains patient responses by clinic and overall.
- c. <u>Comparisons</u> between Staff and Patient Responses for Selected Clinics. For the items common to the two surveys, comparisons were made between staff and patient perceptions. Table 3 summarizes the analysis.

5. DISCUSSION.

a. Operational Hours: Actual and Optimal. Staff members believed the clinic operating hours were reflective of patient needs and that the normal operating hours were both convenient and preferable for the patients. Staff members perceived the clinic operating hours were reflective of staff needs. Opening the clinics before 0700 was not perceived convenient to a significant percentage of the staff. Staff perceived that patients would prefer the clinic being open after 1700. The days of operating clinic hours convenient to the greatest number of staff were the five day work week of Monday through Friday. Selected clinics which operated on Saturdays and/or on Sundays were recognized as acceptable to selected staff members.

Patients reported the normal operating hours of the clinic as both convenient and preferable to them. Patients perceived it less convenient for other family members eligible for medical care to come during the normal operating hours. Opening before 0700 was not perceived convenient to a significant percentage of the patients. Patients preferred keeping the clinics open until at least 1700 (if not until 1800). The work week preferred most frequently was the five day week of Monday through Friday.

b. Feasibility of Operating During Optimum Hours. Comparisons were made between staff and patient responses on the common items. There was no significant difference between clinics on the common items for staff responses. There was no significant difference between staff and patients on their perceptions of (1) the availability of information about the operating hours of the clinic or (2) of the convenience of the operating hours of the clinic. There was a significant difference between patient and staff perceptions of the preferability of the hours to patients, with the staff believing the hours were less convenient to the patients. In fact, the patients reported the clinic operating hours were preferable to them.

Operating the clinics from 0700 through 1700 on Monday through Fridays was perceived best for the staff. Staff recognized patients' preference for keeping selected clinics open until 1800. Keeping the clinic open after 1700 was reported convenient for only a minority of staff respondents (less than 10%).

c. Acceptability of Changes To Staff and Patients. Staff reported being generally unwilling to change the operating hours of the clinic. The clinic operating hours were reflective of staff needs. The possibility of staff working an alternate work schedule like flexitime received neither a favorable nor unfavorable response. Only selected clinics and staff members were favorable to changing the operating hours of their clinic.

6. CONCLUSIONS.

- a. Patients were aware of and accepted the actual operating hours of selected clinics as reported by staff members.
 - b. Patients reported the clinic operating hours were preferable to them.
- c. Staff reported being generally unwilling to change the operating hours of the clinic.

7. RECOMMENDATIONS.

- a. Recommend that the findings of the report be made available to Professional Activities (Ambulatory Care), Health Services Command.
- b. Recommend that no further studies be conducted as patients accepted the normal operating hours. Each medical activity is likely to have clinic operating hours reflecting staff needs and will be generally unwilling to change the operating hours of the selected clinics.

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NOTES TO TABLES

Six clinics were selected for analysis from the 69 clinics responding. The six clinics selected were: (I) radiology, (II) OB-GYN, (III) orthopedics, (IV), audiology, (V) pediatrics, and (VI) dermatology. The column labeled OVERALL represents responses from all the respondents, which includes responses from the six clinics as well as all the remaining clinics.

Table 1 Staff Responses

| VARIABLE | VARIABLE CLINIC: | | | | | | |
|--|------------------|--------------|----------|--------------|--------|--------------|----------------|
| Cell Size (N) | I 16 | 11 12 | 111 8 | IV 6 | V 7 | VI 7 | OVERALL 133 |
| Sex Male (%) Female (%) | 73.3 26.7 | 72.7 27.3 | 100.0 | 16.7 83.3 | | 71.4 28.6 | 61.3 38.7 |
| Percentage of patients coming to cline emergency walk-in (unscheduled) | ic 28.4 | 9.5 | 30.7 | 8.7 | 51.6 | 20.0 | 26.5 |
| scheduled through central appt system (CAS) | 30.0 | 63.5 | 55.1 | | 35.0 | | 43.5 |
| scheduled directly through this clinic (not by CAS) | 49.4 | 31.5 | 21.6 | | | | 43.3 |
| other | 14.4 | 0.7 | 10.0 | 0 | 6.0 | 7.5 | 15.6 |
| SEVEN-POINT LIKERT ITEMS (mean response) where 1 = Minimum and 7 = Maximum | | | | | | | |
| To what extent do patients have trouble finding the clinic? | le 2.2 , | , 1.6 | 2.0 | 4.0 | 1.5 | 1.1 | 2.3 |
| Is public transportation available for patients to get to this medical activity? | r 5.2 | 6.5 | 6.0 | 5.0 | 6.1 | 6.0 | 5.7 |
| How available to patients is information about the operating hours of this clinic? | 5.5 | 6.0 | 6.4 | 5.3 | 6.2 | 5.8 | 6.0 |
| If applicable, to what extent do pation have a choice of the date and time an appointment? | | 5.2 | 3.8 | 4.5 | 5.4 | 5.7 | 5.0 |
| To what extent are the clinic operation hours reflective of patient needs? | | 5.8 | 5.7 | 5.6 | 5.1 | 5.7 | 5.9 |
| How convenient for the patients are the normal operating hours of this clinic? | he 5.9 | 5 7 | . 6.0 | 5.6 | r 0 | 4.8 | |
| To what extent are these clinic operat | | . J. 1 | 0.0 | 2.0 | 2.4 | 4.0 | 5.9 |
| hours preferable to patients? | 5.4 | 5.6 | 5.6 | 5.0 | 4.5 | 5.1 | 5.6 |
| To what extent are the clinic operation hours reflective of staff needs? | ng 5.9 | 5.6 | 4.2 | 4.3 | 5.5 | 5.7 | 5.5 |
| To what extent would the staff be will to change the operating hours of the clinic? | _ | 2.8 | 3.1 | 4.8 | 2.1 | 2.2 | 3.0 |
| To what extent would you be willing to work on an alternate work schedule | like | | | | | | |
| flexitime? | 4.8 | 3.0 | 5.8 | 5.8 | 3.7 | 3.0 | 4.4 |
| | 7 | | | | | 1 | 1 |

Table 1 continued

| VARIABI | Æ | CLIN | iC | | | | | |
|-----------------|------------------|--------------|--------------|-----------|--------------|--------------|-----------|--------------|
| OPERATING HOURS | | • | ** | *** | Ttt | 47 | | * |
| ACTUAL REPO | RTED (Z) | I | II | III | IV | V | VI | OVERALL |
| AM Open | before 0700 | 7.7 | 0 | 0 | 0 | 0 | _ | 2 7 |
| | 0700 | 7.7 | Ö | Ö | 0 | 0 | 0 | 3.7 5.6 |
| | 0730 | 53.8 | Ö | Ö | 100.0 | 0 | 33.3 0 | |
| | 0800 | 30.8 | 100.0 | 83.3 | 0 | 57.1 | 66.7 | 32.4 45.4 |
| | 0830 | 0 | 0 | 0 | Ö | 0 | 0 | 2.8 |
| | 0900 | 0 | Ŏ | Ö | 0 | 42.9 | ŏ | 6.5 |
| | | U | v | V | U | 74.7 | · | 6.3 |
| PM Closed | 1530 | 8.3 | 0 | 0 | 0 | 14.3 | 16.7 | 3.7 |
| • | 1600 | 50.0 | 58.3 | 0 | 20.0 | 57.1 | 0 | 28.7 |
| | 1630 | 25.0 | 33.3 | 83.3 | 80.0 | 28.6 | 83.3 | 56.5 |
| | 1700 | 16.7 | 8.3 | 16.7 | 0 | 0 | 0 | 5.6 |
| · | after 1700 | 0 | 0 | 0 | . 0 | . 0 | 0 | 6.5 |
| CONTENTENT | FOR STAFF (%) | | | | | | | |
| AM Open | before 0700 | 7 1 | ^ | • | • | ^ | _ | |
| Mr open | 0700 | 7.1 35.7 | 0 | 0 25.0 | . 20 0 | 0 | 0 | 7.3 |
| | 07.30 | 28.6 | | | 20.0 | 0 | 33.3 | 19.8 |
| | 0800 | 28.6 | 10.0 90.0 | 0 25.0 | 20.0 60.0 | 16.7 50.0 | 0 66.7 | 15.6 |
| | 0830 | 0 | | 0 | 0.0 | 0 | 0.7 | 44.8 2.1 |
| | 0900 | o · | 0 0 | 25.0 | . 0 | 16.7 | Ö | 7.3 |
| • | 0,000 | U | • | 25.0 | , 0 | 10.7 | | , |
| PM Closed | 1530 | 14.3 | 0 | 25.0 | 20.0 | 0 | 16.7 | 7.1 |
| | 1600 | 35.7 | 50.0 | 0 | 40.0 | 16.7 | 0 | 37.4 |
| • | 1630 | 14.3 | 30.0 | 50.0 | 40.0 | 33.3 | 83.3 | 26.3 |
| | 1700 | 0 | 20.0 | 25.0 | 0 | 16.7 | 0 | 7.1 |
| | 1730 | Ö | 0 | 0 | Ö | 0 | 0 | 1.0 |
| | 1800 | 7.1 | Ŏ | Ö | Ö | 16.7 | ō. | 3.0 |
| • | after 1800 | 7.1 | Ō | 0 | 0 | 0 | 0 | 3.0 |
| | | | | • | | | | |
| | FOR PATIENTS (%) | • | | | ^ | | | |
| AM Open | before 0700 | 0 | 0 | 0 | 0 | 0 16.7 | 0 | 5.7 13.3 |
| | 0700 | 30.8 | 0 | 0 | 0 50.0 | 16.7 | 14.3 0 | 14.3 |
| | 0730 | 23.1 46.2 | 0 90.9 | 40.0 | 16.7 | 33.3 | 57.1 | 47.6 |
| | 0800 | 0 | 0.9 | 40.0 n | 10.7 | 0 | 14.3 | 3.8 |
| | 0830 | ~ | • | 40.0 | 33.3 | 16.7 | 14.3 | 11.4 |
| • | 0900 | 0 . | 9.1 | 40.0 | 33.3 | 10.7 | 14.3 | 11.4 |
| PM Closed | 1530 | 0 | 0 | 0 | 16.7 | 0 | 0 | 1.9 |
| | 1600 | 30.8 | 36.4 | 40.0 | 0 | 0 | 28.6 | 29.2 |
| | 1630 | 38.5 | 36.4 | 40.0 | 33.3 | 33.3 | 71.4 | 37.3 |
| | 1700 | 7.7 | 9.1 | 0 | 16.7 | 0 | 0 | 6.6 |
| | 1730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1800 | 23.1 | 18.2 | 0 | 16.7 | 33.3 | 0 | 11.3 |
| | after 1800 | 0 | 0 | 0 | 0 | 33.3 | 0 | 5.7 |

Table 1 continued

| VARIABLE | CLINI | IC | | | | | |
|---|--|--|---|--|---|--|---|
| DAYS OPERATING 1. ACTUAL OPERATING MTWTHF (%) 2. ACTUAL OPERATING MTWTHFS (%) 3. ACTUAL OPERATING MTWTHFSSU (%) 4. CONVENIENT STAFF MTWTHF (%) 5. CONVENIENT STAFF MTWTHFS (%) 6. CONVENIENT STAFF MTWTHFSSU (%) 7. CONVENIENT PATIENTS MTWTHF (%) 8. CONVENIENT PATIENTS MTWTHFS (%) | I 71.4 0 28.6 85.7 0 0 85.7 | 11 100.0 0 0 90.0 0 71.4 28.6 | 111 85.7 0 0 42.9 0 0 | IV 100.0 0 0 100.0 0 0 83.3 | V 100.0 0 0 60.0 20.0 0 50.0 33.3 | VI 50.0 50.0 0 66.7 33.3 0 60.0 40.0 | OVERALL 80.7 5.0 9.2 82.1 2.8 1.9 75.5 |
| 9. CONVENIENT PATIENTS MIWTHFSSu (%) | 7.1 | 0 | 0 | Ŏ | 16.7 | 0 | 8.2 |
| Have you ever worked under flexitime (or any alternate work schedule than the eight hour day)? Yes (%) No (%) | 25.0 75.0 | 8.3 91.7 | 25.0 75.0 | 16.7 83.3 | | 42.9 57.1 | 29.9 70.1 |
| Is your floor space used by other clinics? Yes (%) No (%) | 6.3 93.8 | 8.3 91.7 _{.,} | 75.0 25.0 | 0 100.0 | 16.7 83.3 | 0 100.0 | 22.0 78.0 |

Table 2

Patient Responses

| VARIABLE | CLI | NIC: | | | | | |
|-------------------------------------|---------|-------|------|-------|------------|-------|----------|
| | I | II | III | IV | v . | VI | OVERALL |
| Cell Size (N) | 89 | 100 | 10 | 13 | 24 | 12 | 585 |
| CEII DIDE (17) | | | | | | - 1 | 1 |
| Sex | | | • | | | .] |] |
| Male (%) | 50.6 | 0 | 20.0 | 58.3 | 47.8 | | 39.9 |
| Female (%) | 49.4 | 100.0 | 80.0 | 41.7 | 52.2 | 33.3 | 60.1 |
| Race | | | | | | | |
| Caucasian (%) | 88.9 | 74.3 | 77.8 | 100.0 | 66.7 | 85.7 | 77.2 |
| Black (%) | 5.6 | 14.9 | 11.1 | 0 | 4.8 | 14.3 | 11.0 |
| Latin (%) | 1.4 | 6.8 | 11.1 | Ö | 23.8 | 0 | 6.5 |
| Asian (%) | 4.2 | 4.1 | 0 | . 0 | . 4.8 | ŏ | 5.4 |
| | | • | | • | | | |
| Rank | -1- | | | | | | |
| E1-E5 (%) | 12.0 | 9.0 | 10.0 | 18.0 | 9.0 | 9.0 | 9.0 |
| E6-WO (%) 01-03 (%) | 22.0 | 3.0 | 10.0 | 9.0 | 14.0 | 9.0 | 16.0 |
| 04~06 (%) | 4.0 | 2.0 | 20.0 | 0 | 5.0 | 0 | 4.0 |
| Government employees | 19.0 | 1.0 | 0 | 27.0 | 5.0 | 9.0 | 14.0 |
| dependents | 3.0 | 1.0 | 0 | 0 | 5.0 | 0 | 2.0 |
| WHICH CLINIC IS PEDS? | 40.0 | ,84.0 | 60.0 | 45.0 | 64.0 | 73.0 | 55.0 |
| Age (mean in years) | 51.1 | 43.2 | 25.8 | 50.0 | 22.1 | 39.7 | 47.3 |
| DOESN'T TALLEY | 21.1 | 43.2 | 23.0 | 30.0 | 22.1 | 39.1 | 47.3 |
| Status | • | | | | | | |
| Active Duty (%) | 16.9 | 12.0 | 22.2 | 7.7 | 26.1 | 8.3 | 13.5 |
| Active Duty Dependent (%) | 12.4 | 29.0 | 33.3 | 23.1 | 47.8 | 25.0 | 16.8 |
| Retired (%) | 34.8 | 4.0 | 0 | 46.2 | 0 | 50.0 | 29.6 |
| Retired Dependent (%) | 31.5 | 49.0 | 44.4 | 23.1 | 26.1 | 16.7 | 36.3 |
| Other (%) | 4.5 | 6.0 | 0 | 0 | 0 | 0 | 3.7 |
| | | | • | | , | | |
| Miles traveled from home to clinic | | | | | | | |
| today (mean) | 35.0 | 22.7 | 68.0 | 22.9 | 15.1 | 28.6 | 28.6 |
| Did you have an appointment today | | | | | | | ! |
| at this clinic? | | | | | | | |
| No (%) | 67.8 | 0 | 20.0 | 0 | 45.8 | 16.7 | 34.0 |
| Yes (%) | 32.2 | 100.0 | 80.0 | 100.0 | 54.2 | 83.3 | 66.0 |
| | | | | | | | |
| If had an appointment, did you have | | | | | | | |
| choice of the date and time of the | 2 | | | | | • | ì |
| appointment? | | | | | | | |
| No (%) | 45.5 | | 87.5 | | 28.6 | 0 | 28.3 |
| Yes (%) | 54.5 | 70.1 | 12.5 | 91.7 | 71.4 | 100.0 | 71.7 |
| Is this your first contact with the | nis | | | | | | |
| clinic? | | | | | | | |
| No (%) | 80.5 | 87.9 | 70.0 | 53.8 | 91.3 | 67.7 | 80.8 |
| Yes (%) | 19.5 | 12.1 | 30.0 | 46. 2 | 8.7 | 33.3 | 19.2 |
| (| 4,7 + 3 | | | -V• L | J. / | 1 | -/ |
| | | | | | | | II . |
| • | | | | | | | |

Table 2 continued

Patient Responses

| VARIABLE | CLINI | C: | | | | • | |
|--|-------|-------|-------|------|--------|-------|---------|
| | I. | II | III | IV | V | VI | OVERALL |
| Have you received any other care | | | | | | | ł |
| from this clinic during the past | | | • | | • | - 1 | Į. |
| six months? | | | | | | | I |
| NO (X) | 41.9 | 55.1 | | 63.6 | 20.8 | 41.7 | 43.1 |
| Yes (%) | 58.1 | 44.9 | 55.6 | 36.4 | 79.2 | 58.3 | 56.9 |
| If received previous care, how many | | | | | | j | |
| total visits have you made to | | | • | | | | 1 |
| this clinic in the past six | | | | | | | 1 |
| months? (mean visits) | 2.2 | 1.4 | 1.2 | 2.1 | 3.7 | 2.5 | 2.5 |
| Educia. (mean visite) | | | _,_ | | | | 1 |
| Is this a follow-up to a previous | | | | | | | • |
| examination at this clinic? | | | | - | | 1 | ł . |
| No (Z) | 65.1 | | 10.9 | 46.2 | 58.3 | 50.0 | 53-8 |
| Yes (%) | 34.9 | 40.2 | 90.0 | 53.8 | 41.7 | 50.0 | 46-2 |
| Is this a referal from another | | | • | - | | | ł |
| clinic? | | | | | | | ł |
| No (Z) | 19.8 | 86.2 | 50.0 | 45.5 | 95.5 · | 50.0 | 64.1 |
| Yes (%) | 80.2 | 13.8 | 50.0 | 54.5 | 4.5 | 50.0 | 35.9 |
| 168 (%) | 00.2 | 13.0 | 20.0 | 34.3 | 4.5 | 30.0 | 33.9 |
| Did you have any trouble finding the | | , | | | | . } | 1 |
| · clinic today? | | | | | | | |
| No (%) | 95.5 | 100.0 | 100.0 | 92.3 | 100.0 | 100.0 | 98.3 |
| Yes (%) | 4.5 | 0 | 0 | 7.7 | 0 | 0 | 1.7 |
| 165 (%) | | | • | | • | | 1 |
| SEVEN-POINT LIKERT ITEMS (mean response) where 1 = Minimum and 7 = Maximum | | | · | | | | |
| | | | | | | | |
| How convenient for you are the normal | | | | | | | |
| operating hours of this clinic? | 6.1 | 6.1 | 5.8 | 5.5 | 5.5 | 6-2 | 6.0 |
| To what extent are these clinic | | | | | | | |
| operating hours preferable to you? | 6.1 | 5.9 | 5.8 | 4.9 | 5.5 | 6.0 | 6-0 |
| operating mours preferable to you: | 0.1 | 3.7 | | 4.7 | ر.ر | 0.0 | 0.0 |
| How convenient is it for you to get to | | | | | • | ł | 1 |
| this clinic? | 4.9 | 4.9 | 2.8 | 5.2 | 4.5 | 5.6 | 4-9 |
| | | | | | | 1 | |
| Is public transportation available for | | | | | | | 1 |
| you to get to this medical activity? | 3.8 | 4.4 | 3.1 | 3.2 | 5.1 | 5.4 | 4.2 |
| | _ | | | | | | |
| How available to you is information about | | 6.0 | | | | | 1 |
| the operating hours of this clinic? | 5.5 | 6.0 | 4.8 | 5.1 | 5.5 | 6.1 | 5.7 |
| If there are other family members eligi | ible. | | | | | i | İ |
| for medical care, how convenient is | | | | | | ļ | 1 |
| for them to get transportation to this | | | | • | • | 1 | ļ |
| | 4.5 | 5.4 | 3.3 | 4.7 | 4.9 | 5.3 | 4.0 |
| medical activity? | 7.7 | J.4 | J. J. | 4./ | 4.7 | رد.ر | 4-3 |
| If there are other family members eligi | ible | | | | • | | 1 |
| for medical care, how convenient is | | | | | | } | 1 |
| for them to come during the normal | | | | | | Ì | |
| operating hours of this clinic? | 5.2 | 5.4 | 3.7 | 5.8 | 4.6 | 5.9 | 5.1 |
| obereriak monte of cure citure; | | | | 3.0 | | | 1 . |
| | 11 | | | | | | |

Table 2 continued
Patient Responses

| VARIABL | Ε | CLINI | ic: | | • | | | |
|-----------------|-----------------|----------|------|------|-------|------|-------|--------|
| • | | I | II | III | IV | v | ٧I | OVERAL |
| OPERATING HOURS | | | | | | | | 11 |
| ACTUAL REPORT | | | | | • | | |]] |
| AM Open | before 0700 | 8.0 | 3.0 | 0 - | 0 | 17.0 | 0 | 4.0 |
| | 0700 | 11.1 | 1.2 | 0 | 0 | 0 | 0 | 3.4 |
| | 0730 | 29.2 | 8.8 | 12.5 | 18.2 | 8.3 | . 0 | 12.2 |
| | 0800 | 44.4 | 71.2 | 87.5 | 72.7 | 70.8 | 100.0 | 66.8 |
| | 0830 | 0 | 3.7 | 0 | 0 | 0 | 0 | 2.7 |
| • | 0 900 | 4.2 | 8.8 | 0 | 9.1 | 4.2 | . 0 | 6.6 |
| PM Closed | 1530 | 12.7 | 0 | . 0 | 0 | 0 | 0 | 5.4 |
| : | 1600 | 46.5 | 64.9 | 87.5 | 54.5 | | 9.1 | 51.8 |
| | 1630 | 15.5 | 11.7 | 12.5 | 27.3 | 4.2 | 90.9 | 20.2 |
| | 1700 | 18.3 | 15.6 | 0 | 0 | 12.5 | 0 | 14.8 |
| | after 1700 | 4.0 | 0 | 0 | 0 | 0. | 0 | 2.2 |
| CONVENIENT (| () | | | | | | | İ |
| AM Open | before 0700 | 2.0 | 2.0 | 0 | 0 | 25.0 | 0 | 2.8 |
| | 0 700 | 10.4 | 8.⁄5 | 0 | Ō | 18.8 | · 0 | 8.0 |
| | 0730 - | 12.5 | 6.8 | 0 | 16.7 | 6.3 | Ō | 6.4 |
| • | 0 800 | 52.1 | 40.7 | 57.1 | 50.0 | 43.8 | 90.9 | 47.6 |
| • • | 0830 | 2.1 | 3.4 | . 0 | 16.7 | 6.3 | 0 | 2.8 |
| . • | 0900 | 4.2 | 18.6 | 14.3 | 0 | 0 · | 9.1 | 9.4 |
| PM Closed | 1530 | 0 | 0 | · O. | .0 | 0 | . 0 | 1.2 |
| | 1600 | 38.3 | 28.6 | 33.3 | 12.5 | 27.8 | Ŏ | 28.3 |
| | 1630 | 10.6 | 4.1 | 33.3 | 25.0 | . 0 | 81.8 | 15.4 |
| | 1700 | 25.5 | 10.2 | 0 | 25.0 | 44.4 | 9.1 | 18.1 |
| | 1730 | 2.1 | 4.1 | 0 | 0 | 0 | 0 | 1.8 |
| | 1800 | 2.1 | 12.3 | 16.7 | 12.5 | 11.1 | Ö | 6.6 |
| | after 1800 | 6.0 | 4.0 | 0 | 0 | 11.1 | 0 | 5.1 |
| DAYS OPERATIN | ıs | | • | | | | | 11 |
| | ERATING MIWIHF | (%) 76.2 | 78.7 | 33.3 | 100.0 | 95.0 | 100.0 | 77.5 |
| | ERATING MIWIHFS | | 0 | 93.3 | 0 | 5.0 | 0 | 3.2 |
| | ERATING MTWThFS | | ő | . 0 | Ö | 0 | Ö | 3.5 |
| | T PATIENTS MIWI | | 39.4 | 28.6 | 42.9 | 29.4 | 80.0 | 47.0 |
| | T PATIENTS MIWI | | 6.1 | 0 | 28.6 | 29.4 | 10.0 | 11.0 |
| | T PATIENTS MIWI | | 7.6 | Ŏ | 0 | 11.8 | 0 | 7.0 |

Table 3

Comparison Between Staff and Patient Responses

| OVERALL: | OVERALL: Patients vs Staff |
|--|--|
| COMMON ITEMS: | F (df) P Effect |
| l. How convenient for the patients are the normal operating hours of this clinic? | 1.29 (1/643) ns |
| 2. To what extent are these clinic operating hours preferable to patients? | 9.03 (1/606) .0028 p>s |
| 3. Is public transportation avail- able for patients to get to the medical activity? | 31.48 (1/578) .0001 s>p |
| 4. How available to patients is information about the operating hours of the clinic? | 2.12 (1/620) ns |
| BETWEEN SIX SELECTED CLINICS: | BETWEEN CLINICS FOR 6 SELECTED CLINICS |
| STAFF RESPONSES: | F (df) p |
| 1. How convenient for the patients are the normal operating hours of this clinic? | 0.87 (5/48) ns |
| 2. To what extent are these clinic operating hours preferable to patients? | 0.59 (5/42) ns |
| 3. Is public transportation avail- able for patients to get to the medical activity? | 1.32 (5/47) ns |
| 4. How available to patients is information about the operating hours of the clinic? | 0.70 (5/48) ns |

Table 3 continued

| PATIENT RESPONSES: | F (d | f) | | P | |
|---|----------------|---------|--------------|----------------|-------------------|
| 1. How convenient for the patients are the normal operating hours of this clinic? | 1.10 | (5/217) | n | | |
| To what extent are these clinic operating hours preferable to patients? | | (5/208) | វា | ıs | |
| 3. Is public transportation available for patients to get to the medical activity? | 1.94 | (5/193) | r | ts | |
| 4. How available to patients is information about the operating hours of the clinic? | 1.31 | (5/209) | r | ns | |
| BETWEEN SIX SELECTED CLINICS: | MAIN | EFFECTS | | INTERACT | CION |
| 2-WAY ANOVA | Clinics F P | | Staff · P | Clinics x F | Pnt vs Staff P |
| 1. How convenient for the patients are the normal operating hours of this clinic? | 1.20 ns | 2.50 | ns | 0.75 | ns |
| To what extent are these clinic operating hours preferable to patients? | 1.97 ns | 6.85 | .009 | 0.34 | ns |
| 3. Is public transportation avail- able for patients to get to the medical activity? | 2.22 ns | 17.61 | .001 | 0.54 | ns |
| 4. How available to patients is information about the operating hours of the clinic? | 1.22 ns | 0.61 | ns | 0.63 | ns |

APPENDIX A

OPERATING HOURS INVENTORY - STAFF (OVERALL) N = 133

Please answer all the items by filling in, or circling one choice, or whatever appears to be an appropriate response. For some items, a scale of seven points is to be used where 1 = Minimum and 7 = Maximum. If not applicable or do not know, please circle "NA/DNK".

| Example: I just received a cash bonus; the extent I feel happy is: | | |
|---|-----|-------------|
| Minimum 1 2 3 4 5 6 7 Maximum NA/DNK | | |
| Clinic Name: Date: | | |
| Rank/Grade: Position: | | |
| Sex: Male Female 61.3% 38.7% | | |
| What percentage of the patients coming to your clinic are: | | |
| Emergency walk-in (unscheduled) . 26.5% | | • , |
| Scheduled through central appointment system (CAS) 43.5Z | | |
| Scheduled directly through this clinic (not by CAS) 42.7% | | |
| Other (please specify) 15.6% | | |
| What are the normal operating hours of this clinic (to the best of your knowledge)? Please be specific. | | |
| Hours in AM Circle day(s) clinic operates | | |
| Hours in PM M Tu W Th F Sat Su | _ | |
| To what extent do patients have trouble finding the clinic? | 포 | z Na/DNK |
| Minimum 1 2 3 4 5 6 7 Maximum NA/DNK | 2.3 | 10.5% |
| Is public transportation available for patients to get to this medical activity? | | |
| Minimum 1 2 3 4 5 6 7 Maximum NA/DNK | 5.7 | 15.0% |
| How available to patients is information about the operating hours of this clinic? | | |
| Minimum 1 2 3 4 5 6 7 Maximum NA/DNK | 6.0 | 6.0% |
| If applicable, to what extent do patients have a choice of the date and time of an appointment? | | |
| Minimum 1 2 3 4 5 6 7 Maximum NA/DNK | 5.0 | 17.8% |
| To what extent are the clinic operating hours reflective of patient needs? | | |
| Minimum 1 2 3 4 5 6 7 Maximum NA/DNK | 5.9 | 6.0% |
| How convenient for patients are the normal operating hours of this clinic? | | |
| Minimum 1 2 3 4 5 6 7 Naximum NA/DNK | 5.9 | 6.0% |

| To what extent are these clinic operating hours preferable to patients? | x | 7 NA/DNK |
|---|----------|-------------|
| Minimum 1 2 3 4 5 6 7 Maximum NA/DNK | 5.6 | 14.37 |
| To what extent are the clinic operating hours reflective of staff needs? | | |
| Minimum 1 2 3 4 5 6 7 Maximum NA/DNK | 5.5 | 6.8% |
| To what extent would the staff be willing to change the operating hours of this clinic? | | |
| Minimum 1 2 3 4 5 6 7 Maximum NA/DNK | 3.0 | 18.0% |
| What specific operating hours would be most convenient for you, that is, when would you prefer to work? Please be specific as to the hours and the days of the week. Hours in AM Circle day(s) clinic operates | | |
| Hours in PM M Tu W Th F Sat Su | | |
| To what extent would you be willing to work on an alternate work schedule like flexitime? | | |
| Minimum 1 2 3 4 5 6 7 Maximum NA/DNK | 4.4. | 20.3% |
| Have you ever worked under flexitime (or and alternate work schedule than the eight hour day)? | ł | |
| Yes No 29.9% 70.1% | | , |
| Is your floor space used by other clinics? Yes No | • | |
| 22.0% 78.0% If yes, which clinic and when? | | |
| What do you feel are the most convenient operating hours for the patients? | ! | |
| Hours in AM Circle day(s) clinic operates | | |
| Hours in PM M Tu W Th F Sat Su | | |
| If the operating hours most convenient for you to work at this clinic diff from the normal operating hours, for what personal reason(s) would you request a change in the operating hours of this clinic? | er | |
| Additional comments (optional): | | |
| | | |

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Thank you for your cooperation.

APPENDIX B

OPERATING HOURS INVENTORY - PATIENTS (OVERALL) N = 585

Please answer all the items by filling in, or circling one choice, or whatever appears to be an appropriate response.

| Clinic Name: | Date: | Time of day: |
|---|--------------------------------|---|
| Your Sex: Male Female 39.9% 60.1% | Rank/Grade (civ | ilian): |
| Age: <u>47.3</u> (years) | Race/Ethnic Back | kground: |
| Your Status: a) Active Duty 13.5% d) Retired depend | 16.8% dent e) Other: | nt c) Retired 29.6% |
| 36.3% How many miles one way did you clinic today? 28.6 (Miles) | 3.7% have to travel from you | ur home to get to this |
| ZO.0 (FILLES) | • | · |
| Did you have an appointment to | lay at this clinic? | Yes No 66.0% 34.0% |
| If yes, did you have a choice of | of the date and time of | the appointment? Yes No 71.7% 28.3 |
| If no choice of date and/or tir | ne of appointment, why | not? |
| Is this your first contact with Have you received any other can | 19.2% | No 80.8% ing the past six months? |
| Yes No 56.9% 43.1% If yes, how many total visits leganths? 2.5 (visits) | have you made to this c | linic in the past six |
| Is this a follow-up to a previous | ous examination at this | clinic? Yes No 46.2% 53.8% |
| Is this a referral from another | r clinic? Yes No 35.9% 64.1 | |
| If yes, which clinic? | | |
| Did you have any trouble finding | • | Yes No 1.7% 98.3% |
| To the best of your knowledge, clinic? Please be specific. | | |
| Hours in AM | Circle day(s |) clinic operates |
| | M Tu W | |
| What was the medical reason for specific medical complaint or s | | |

A scale of seven points is to be used where 1 = Minimum and 7 = Maximum. If the item is not applicable, or you do not know, please circle "NA/DNK".

| Example: I just received a | cash bonus; the | extent I feel happy is: | İ | • | | | |
|---|-------------------|------------------------------|-----|-------------|--|--|--|
| Minimum 1 2 3 | 4 5 6 7 | Maximum NA/DNK | × | z na/dnk | | | |
| How convenient for you are the | normal operating | hours of this clinic? | | | | | |
| Minimum 1 2 3 | 4 5 6 7 | Maximum NA/DNK | 6.0 | 12.5% | | | |
| To what extent are these clinic | operating hours | preferable to you? | | | | | |
| Minimum 1 2 3 | 4 5 6 7 | Maximum NA/DNK | 6.0 | 15.6% | | | |
| How convenient is it for you to | get to this cli | nic? | | | | | |
| Minimum 1 2 3 | 4 5 6 7 | Maximum NA/DNK | 4.9 | 9.2% | | | |
| Is public transportation availa | ble for you to go | et to this medical activity? | | | | | |
| Minimum 1 2 3 | 4 5 6 7 | Maximum NA/DNK | 4.2 | 20.0% | | | |
| How available to you is information about the operating hours of this clinic | | | | | | | |
| Minimum 1 2 3 | 4 5 6 7 | Maximum NA/DNK | 5.7 | 14.9% | | | |
| If there are other family members eligible for medical care, how convenient is it for them to get transportation to this medical activity? | | | | | | | |
| Minimum 1 2 3 | 4 5 6 7 | Maximum NA/DNK | 4.9 | 26.7% | | | |
| If there are other family member is it for them to come during t | | | | | | | |
| Minimum 1 2 3 | 4 5 6 7 | Maximum NA/DNK | 5.1 | 29.9% | | | |
| What specific operating hours would be most convenient for you, that is, when would you prefer to come to this clinic? Please be specific as to the hours and the days of the week. | | | | | | | |

| Hours | in | AM | Circ] | le | day(| s) | clir | ic | ope | rate | 25 |
|-------|----|----|-----------|----|------|----|------|----|-----|------|----|
| Hours | in | PM | M | Tu | W | Th | F | Sa | t | Su | |

If the operating hours most convenient for you to come to this clinic differ from the normal operating hours, for what personal reason(s) would you request a change in the operating hours of this clinic?

Thank you for your cooperation

The second secon